



REMARKS

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Claims 25, 26, 28-32, 36 and 40-44 are pending. Claim 20 is cancelled herein.

Applicant respectfully asserts that this is a proper amendment after final rejection in view of 37 CFR 1.116 because it cancels claim 20, complies with the requirements of form for claim 40, and no new search or consideration is required.

I. The claim objections.

Applicant thanks the Examiner for indicating language to be amended. An amendment has been made for antecedent basis reasons to claim 40. No other amendments to claim 40 have been made. This is not a narrowing amendment.

II. The anticipation rejection of independent claim 20 and dependant claims 25, 26, and 28 in view of Siersch 94 08 066.6

Claim 20 has been cancelled herein. The dependent claims (except for claims 41 and 42) all depend from claim 25 which previously depended from claim 20. Therefore, claim 25 has been amended to depend from claim 40. No new matter has been added. No new search is required because claim 40 was examined previously as discussed below.

III. The obviousness rejections of independent claim 40 and dependent claims 36 and 44 in view of Siersch, DE 94 08 066.6.

Applicant cited the Sierch reference on an IDS, and it was also overcome in the German examination which issued as DE: 198 22 255 C2. Thus, applicant is respectfully therefore very familiar with this reference.

Siersch describes a stereo microscopic array with a fiber optic lighting device exclusively for incident light – bright-field illumination without teaching or suggesting the limitations of claim 40 as claimed in the present invention, i.e.,

“... the illumination is effected at an angle to the optical axis of the microscope by means of at least one light conductor *so that no direct light falls into the observation channels.*” (*emphasis*

added).

This limitation of claim 40 is a prerequisite to ensure that in the case of reflecting objects (shiny metal surfaces, glass surfaces, moist or watery surfaces), no direct lighting reflexes will fall into the observation channels in the entire zoom region or the magnification region of the stereo microscope. The observation will otherwise be greatly disrupted by these reflections and represents a major deficiency of Siersch device, because Siersch does not ensure *that no direct light falls into the observation channels.*

In contrast, Siersch in actuality, instead only directs some of the direct light away from the observation channels and not "all" as claimed in claim 40. Although the Siersch reference has a minimal disclosure and minimal worth as a reference, it can be seen in a comparison of Fig.3 of Siersch that at Ref Number 22 an arrow indicates that there is definitely at least some reflected light directly incident on the observation optics (12,13) of Siersch. This is due in part to lens 14 (which is not a light conductor per se) in Siersch being implemented rather than using two more defined and directed fiber optic outputs like the useage of only the "FO" output(s) shown in Figure 4 of the present invention. Also, as can be readily seen in Figure 4 of the present invention, the lowest observation lens "L" is positioned above the "FO" light source(s) so that the Object Field cone shown by "OF" is enabled by the at least one light conductor (FO, LL). In contrast, Fig. 3 of Siersch shows light guide 21 positioned differently and above observation lens 13, and also uses a lens 14 instead of a light guide, so that the combination of different structures in Siersch does not result in the same type of precise object field cone OF wherein "no direct light falls into the observation channels" as shown in Figure 4 of the present invention.

Applicant respectfully notes that discussing the different positioning of the structures above is not arguing limitations not in the claims but merely clearly discussing how claim 40 is different in context by showing that Siersch can not teach or suggest the specifically claimed limitation of claim 40 that *that no direct light falls into the observation channels* of the present invention.

Again, when applicant disclosed this reference to USPTO, applicant knew of its lack of teaching and suggesting of claim 40, at least, and knew it was merely a background reference which was overcome in the German examination.

In addition, all of the other embodiments described in Siersch, which are limited solely to possible lighting arrays, have the same deficiency and restrict the teachings of Siersch (only diffuse reflecting substances can be practically observed). In particular, there is an array specified in Siersch with light-emitting diodes that is technically entirely useless since it will result in poor visibility from the reflecting substances under low-power observation (small magnifications and large depth contrast area of the stereo microscope). Therefore, applicants respectfully assert that Siersch merely teaches and suggests the known problems in the art.

Therefore, all of the limitations of claim 40 are not taught or suggested by Siersch.

IV. The obviousness rejections of dependent claims 30-32, 41 and 43 in view of Siersch and Takagi, U.S. 5,140,458.

Takagi describes an optical system in which the observation optics and illumination optics are coupled and driven by a motor. A one-channel optical observation system, not shown in more detail, and an illumination system which is illuminated via an incandescent lamp directly and **not via light guides**. Therefore, the disclosed structure is totally different from claim 40.

Claims 30 to 32 and 42-43 according to the invention describe a **light guide illumination system which can be adjusted manually or via motor** and which can be moved synchronously with the observation system (claim 30). Since all of the above-mentioned claims according to the invention are tailored to illumination **via light guides** on the **arrangement of a stereo microscope**, there is no overlap of subject matter with U.S. 5,140,458.

Therefore, Takagi does not respectfully make up for the deficiencies of Siersch, and does not render the claims obvious because it respectfully would not be obvious include Takagi's zoom arrangements into Siersch which is a totally different kind of device. There would respectfully be no motivation or suggestion for such a combination as required by MPEP 706.02(j).

V. The rejection of Claim 42 in view of the above references plus Greenberg.

The office action respectfully does not provide the required reasoning for a combination three

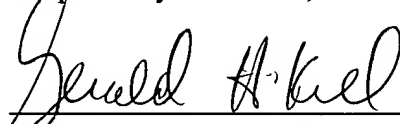
references to reach the conclusion that it would have been obvious to include swivelable optics from Greenberg into the Siersch microscope in order to provide different magnifications at different angles and also in combination with Takagi. The rejection is respectfully merely an unsupported hindsight analysis statement, not in accordance with MPEP 706.02(j). Applicant does not respectfully believe it would be obvious to make said combination, and ask that reasoning in accordance with MPEP 706.02(j) be provided as required or an affidavit of the examiner be provided to support this statement if it is based on the Examiners knowledge as required by MPEP 2144.03.

VI. Conclusion.

In light of the *FESTO* case, no argument made herein was related to the statutory requirements of patentability unless expressly stated herein. No argument made was for the purpose of narrowing the scope of any claim unless applicant has explicitly stated that the argument is narrowing.

Therefore, as all of the claims depend from claim 40, it is respectfully requested that all of the claims be reconsidered and allowed. Applicants note the claims may have to be renumbered if allowed.

Respectfully submitted,



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MARKED-UP CLAIMS:

Please cancel claim 20.

25. (Once amended) The illumination arrangement according to claim 40 [20], wherein the illumination is carried out via at least one light guide.

40. (Once Amended) An illumination arrangement for a stereo microscope, in particular, a Greenough type comprising:

a least one illumination channel arranged in a plane essentially orthogonal to [the] a plane of the two observation channels, wherein the illumination is effected at an angle to the optical axis of the microscope by means of at least one light conductor so that no direct light falls into the observation channels and a fluorescence excitation is effected through the light conductor.

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